

The logo is a circular emblem with an orange background. It features a white silhouette of a pair of crossed pliers in the center. The word "TAMPA" is written in white, uppercase letters along the top inner edge of the circle, and "HACKERSPACE" is written along the bottom inner edge. The main title "Git Source Control" is overlaid on the logo in a large, bold, black sans-serif font.

Git Source Control

A Brief Introduction

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What is Version Control

- Source Control
- Revision Control
- Change Tracking



Why?

- Track changes
- Revert mistakes
- Merge conflicts



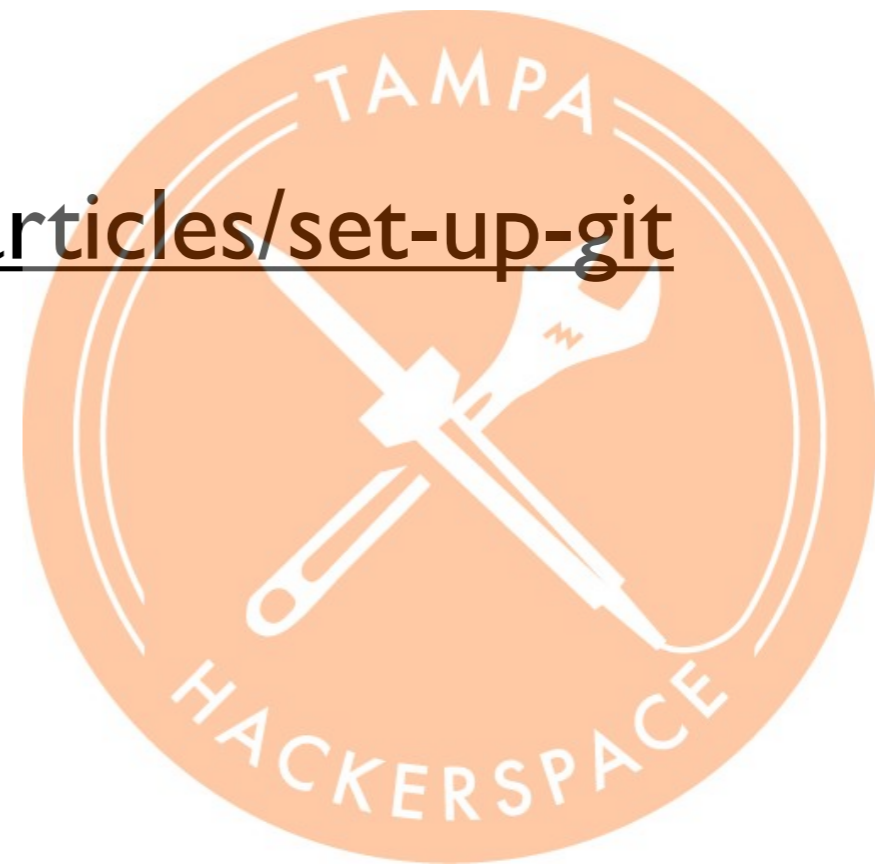
Why GIT

- Distributed
- Free
- Designed for collaboration



Get Git

- <https://help.github.com/articles/set-up-git>



Getting Git

- Repository
- Commits
- Staging
- Branches
- Remotes



Repository

- A collection of files



Commits

- How your repo looks at a point in time



Staging

- Files that are ready to be committed

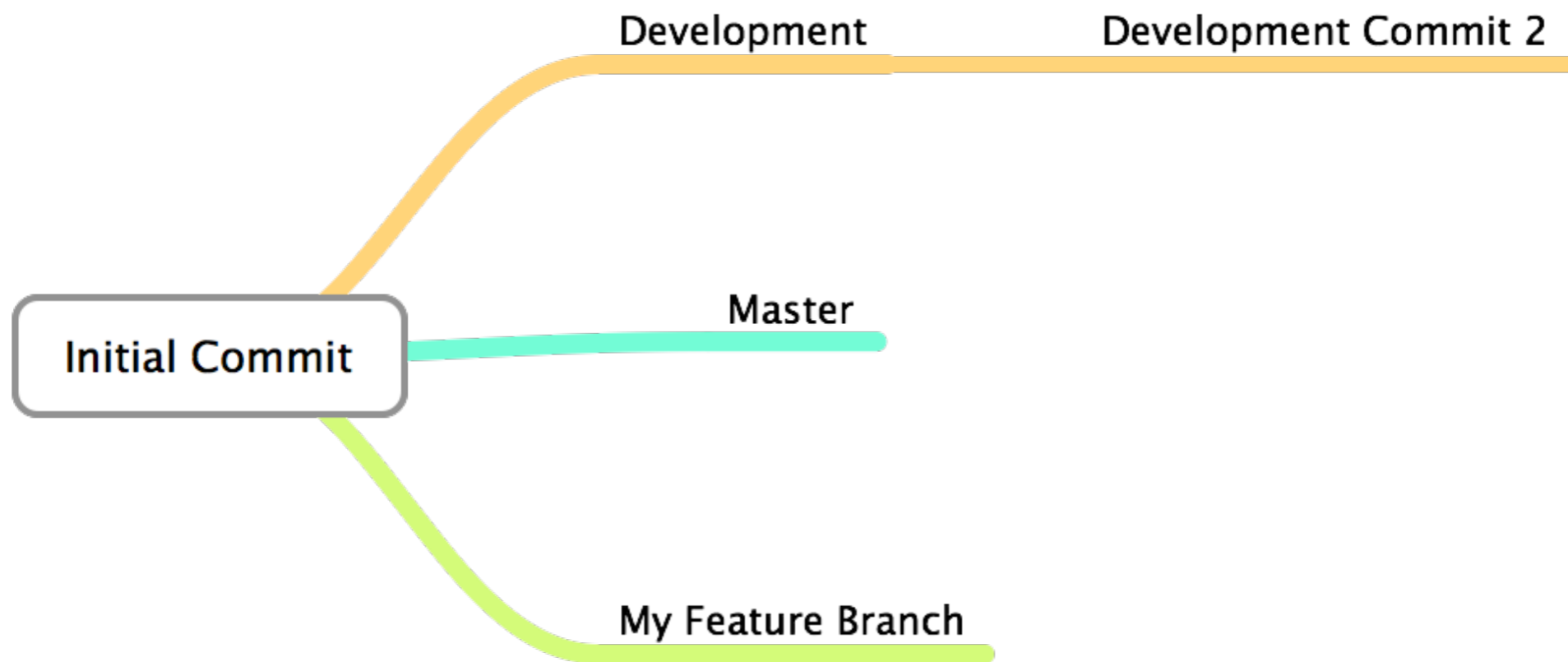


Branches

- Different versions of your code
- Can grow and change on their own



Branches



Remote

- Remote git server you can sync to
- In addition to your LOCAL git server



Git Started

- Initialize Repo
- Make some changes
- Add them
- Commit them
- Fork it



Initialize

- `cd my_repo`
- `git init`



Create Some Files

- *touch README.md*
- *\$EDITOR README.md*



Add Some Files

- *git add README.md*
- *git add .*



Put a ring on it...

- `git commit -m [COMMIT MESSAGE]`
- `git commit`



Branching

- *git branch [NAME]*
- *git checkout [NAME]*
- *git checkout -b [NAME]*



Merging

- *git checkout [branch 1]*
- *git merge [branch2]*
- *branch2 will have it's changes pulled into branch 1*



History

- *git log*
- *git log —oneline*
- *git log —oneline —graph*



Sharing it

- `git remote add [name] [URL]`
- `git push [remote] [branch]`
- `git pull [remote] [branch]`



Graphical Tools

- Github for X
- gitx (os x)
- Dozens of others



Graphical Tools

- Hide what's going on
- Make some tasks harder
- Look less “hacker”



Best Practices

- Feature branches
- Commit Early, Commit Often
- Don't break master
- Don't break master
- Don't break master



Github

- Gold standard for hosted git repos
- Free for public stuff
- Private repos at cost
- Educational groups can get private repos for free



Alternatives

- Bitbucket
- Gitorious
- You can host your own
- Many others...



Questions

- Google [doing x in git]

